



File Code: 3410 (NA-02-05)

Date: August 22, 2002

Subject: 2002 Aerial Sketchmapping Survey

To: Clyde Thompson, Forest Supervisor
Monongahela National Forest

On July 8 and 15, 2002, Rick Turcotte, Martin Mackenzie and Bill Jones of Forest Health Protection (FHP), Morgantown along with Morris Ruddle, Jane Bard, Melissa Van Gundy and Tracy McKnight conducted an aerial sketchmapping survey of the Monongahela National Forest. The accompanying maps show the general locations and types of damage observed during these flights and those conducted by the State of West Virginia, Department of Agriculture.

This year, gypsy moth defoliation, frost/freeze damage, scattered mortality pockets, and unknown discoloration and damage were observed within the proclamation boundaries of the Forest. The following table shows the number of acres sketchmapped for each District.

2002 Sketchmapped Damage in Acres

District	Gypsy moth defoliation	Beech bark disease complex	Frost/Freeze Damage	Pine Decline	Unknown Damage	Total
Cheat	0	0	0	0	201	201
Gauley	0	0	13,849	0	46	13,895
Greenbrier	0	2,794	0	0	590	3,384
Marlinton	2,291	6,053	0	106	340	8,790
Potomac	20,940	2,013	0	0	0	22,953
White Sulphur Springs	4,635	0	0	0	48	4,683
Total	27,866	10,860	13,849	106	1,225	53,906

Gypsy moth: Approximately 27,866 acres of oak forest were defoliated by the gypsy moth this year. This is a large decrease from the 46,039 and 42,515 acres sketchmapped in 2001 and 2000, respectively. Many of the areas sketchmapped this year have suffered repeated defoliation over the last three years. This defoliation, in combination with the dry conditions occurring this summer may result in tree mortality in those areas. Ground surveys to support a potential suppression project for this insect are ongoing.



Beech bark disease (BBD): Beech bark disease is a disease complex caused by a combination of native fungi and an introduced insect. BBD results from the interaction between the introduced beech scale insect *Cryptococcus fagisuga* Lind. and the fungus *Nectria coccinea* var. *faginata* Lohman or *N. galligena* Bres. This complex can cause significant bole cankering and mortality in American beech, *Fagus grandifolia* (Ehrh.). David Houston (NES, Hamden, retired) estimates that resistant beech trees (those that remain scale and defect free) are usually less than 1% of the population of this species, but because they occur in groups, relatively large numbers of them may occur locally within some forests. More information about BBD is given in the enclosed Forest Insect and Disease Leaflet 75.

Control: Once the fungus is established in a tree, no known control is currently possible. At this time, FHP is not recommending treatment of this complex, but we will continue to monitor these areas through next year's aerial and ground surveys.

Frost/Freeze damage: The Monongahela and a large percentage of West Virginia and the surrounding states experienced a significant freeze/frost damage event during the week of May 18, 2000. Damage to trees ranged from scattered leaf burn to a complete loss of leaves. Ground truthing of sights on the Gauley Ranger District showed that American beech and yellow birch were the tree species hardest hit by the freeze.

Pine Decline: Several small pockets of scattered pine mortality and discoloration were observed in the Marlinton Ranger District. FHP is planning on visiting these sites in the near future to determine the extent and cause of this decline.

Unknown Damage: Several small-scattered pockets of discoloration, defoliation and mortality were also mapped through the forest. FHP is planning on visiting these sites in the near future to determine the cause of this damage.

We ask that all field going personnel continue to monitor for the evidence of defoliation, discoloration and mortality in their areas and report any insect and disease activity to the Morgantown field office.

I personally would also like to extend my appreciation to Morris, Jane, Melissa and Tracy for their valuable assistance in this survey. If you or any of your staff have any questions or comments regarding this survey, please contact Rick Turcotte at (304) 285-1544.

Sincerely,

JOHN W. HAZEL
Field Representative
Forest Health Protection

Enclosures
Cc: District Ranger, Cheat RD w/enclosures
District Ranger, Gauley RD w/enclosures
District Ranger, Greenbrier RD w/enclosures
District Ranger, Marlinton RD w/enclosures
District Ranger, Potomac RD w/enclosures
District Ranger, White Sulphur Springs RD w/enclosures

JWH/RMT